NEW MAPS.

AMERICA.

U. S. Geological Survey Maps.

United States.—Geneva-Racine Quadrangle, Wisconsin. Scale, 1:125,000, or 1.9 statute miles to an inch. U. S. Geological Survey, Washington, 1907.

The special interest of this topographic sheet is in the fact that it is a combination of the six sheets (Eagle, Muskego, Bay View, Geneva, Silver Lake, and Racine) originally published on a scale of about a mile to the inch, with a contour interval of twenty feet. By combining these sheets into one larger sheet the scale is reduced one-half from the original publication. The information contained on six sheets is compressed into this smaller sheet, making a map, very convenient to handle, of the celebrated lake region of southeastern Wisconsin. The engraved sheet is 16 by 24 inches in size. It is a beautiful piece of work, and, in the absence of any adequate map of this interesting region in our atlases, the sheet should be widely introduced among that part of the public most interested.

Of the eighty or more lakes included within this area nearly all are in its western half among the Morainic hills. A student of the map will readily recognize the fact that the drainage there is quite irregular, while in the eastern part of the area long and broad ridges extend north and south parallel to the lake shore. Here the topography is of the rolling type, as compared with more rugged forms further west, and here also the drainage is more regular, with main valleys parallel to the lake shore.

U. S. Hydrographic Office Charts.

Pilot Chart of the North Atlantic Ocean, May, 1907.

New York City.—Sketch of Richmond Borough, City of New York. Showing General Location of Proposed N. Y. and N. J. Bridges. J. B. Lyon Company, Albany, N. Y., 1907.

Illustrates the report of the New York Interstate Bridge Commission. The proposed swing bridges are shown in red, one of them to connect Port Richmond with Bergen Point, which, with a bridge to Manhattan across the Hudson from Hudson Co., N. J., would supply land communication from Staten Island to the centre of Greater New York; the other bridge site is from the west end of the trans-Staten Island Boulevard (Holland Hook) to Elizabethport, which would add to the availability of the waterfront along the Kills, now growing in importance for manufacturing purposes.

Canada.—Topographic Map. Scale, 1:63,360, or 1 statute mile to an inch. Niagara, Dunnville, and Welland sheets in Province of Ontario. Intelligence Branch, Department of Militia and Defence, Ottawa, 1907.

All sheets of this map show very clearly a great deal of cultural detail. The symbols distinguish, for example, between wooden buildings and those constructed of stone or brick; between telegraph and telephone offices, between churches with spires and those without them, and between roads that are

metalled and those that are not. It is gratifying to see that the distribution of forests is shown.

The publication of these sheets of a new map of Canada by the Surveys Division of the Department of Militia and Defence has only recently begun, and it promises to supply the long-felt need of a good general map of the country.

From information supplied to the *Geographical Journal* (April, 1907) the following statement relating to the preparation for this new map is taken:

Elaborate and exact trigonometrical surveys take a long time to execute and are very costly; so, rather than delay the matter, as the object was to produce, as rapidly as possible, reasonably reliable military maps, a more expeditious system of surveying was decided upon, giving a resulting accuracy sufficient for the purpose. This consisted in running a series of theodolite traverses some 15 miles apart, and adjusted upon triangulation points of the U. S. Lake Survey and the U. S. Coast and Geodetic Survey. To these traverses the topographical detail has been adjusted, the latter being at first filled in by prismatic compass, but now entirely by plane-table surveys on the scale of two inches to a mile. The contours, which are at 25 feet intervals, depend upon lines of spirit-levels run about five miles apart and referred to the datum of the U. S. Coast and Geodetic Survey. These are supplemented by levels run with Abney levels and aneroid readings. As a check upon the foundation work of the map and to ensure greater accuracy, a topographic triangulation has recently been commenced.

Since 1904 about $20,000 has been expended annually on the work, and about 6,200 square miles of topography have been completed, including the Niagara peninsula, from Hamilton to Port Dover, with the greater portion of Eastern Ontario, a triangle with Ottawa, Gananoque, and Cornwall at its extremities. This triangle is now being extended to embrace another triangle having its apex at Montreal. The sheets, which are on the polyconic projection, are now creditably produced and printed in colours—water, blue; contours, brown; wooded land, green. Very complete information is given by a careful selection of symbols, concerning means of communication, important buildings, and many other matters. Each sheet measures 25 x 18 inches. It is sincerely to be hoped that they will be issued regularly and as rapidly as possible.

MEXICO-UNITED STATES.—Stations along the Land Boundary between Mexico and the United States from the Rio Grande to the Pacific. Scale, 46 statute miles to an inch. *Bulletin* 56 U. S. National Museum, Washington, 1907.

The position of the boundary monuments along the line is shown. A profile of the boundary from the Rio Grande west shows that the highest point of it, over 2,000 meters, is near the western border of New Mexico.

MEXICO-UNITED STATES.—Differentiation Tracts of the Mexican Boundary Line. Scale, 185 miles to an inch. *Bulletin* 56, U. S. National Museum, Washington, 1907.

Symbols are used to show the various types of country through which an expedition from the National Museum collected mammals—*i. e.*, Pacific Coast Tract, Western Desert Tract, Elevated Central Tract, Eastern Desert Tract, Middle Texan Tract, and Tamaulipan Subtropical Tract.

PERU.—Plano del Rio Bajo Marañon. Surveyed by first Lieut. Don Pedro Buenaño. By order of the Prefect of the Department of Loreto, Colonel Don Pedro Portillo. Scale, 1 nautical mile to 5 mm. *Boletin* of the Geographical Society of Lima, Vol. 19, No. 3, 1906.

The scale of the river's width is augmented three times to facilitate the tracing of the channel. All the rivers of this province which include the Marañon and most of the southern rivers that go to form the upper Amazon are being surveyed. The exaggerated scale of this sheet permits a clear definition of the forms of the islands.

AFRICA.

BRITISH AFRICA.—Uganda (Provisional) Sheets, 86-B and 86-F. Scale, 1:250,000, or 3.95 statute miles to an inch. Compiled in the Topographical

Section General Staff. Edward Stanford, Agent, London, 1905. (Price, 1s 6d each.)

Black-and-white sheets showing many native routes and settlements, with elevations in figures, and the drainage fully expressed as far as surveyed. Such maps, though provisional, will be extremely useful in the prosecution of further enterprises and to supply important detail for smaller sheets.

FRENCH SOMALI.—Plan de la Ville et du Port de Djibouti. Scale, 275 meters to an inch. *Bulletin* of the Committee of French Africa, No. 4, 1907, Paris

A black-and-white sketch map on a scale sufficiently large to show the plan of the port, the position of the public buildings, the tramway, railroad, shipping, etc.

GOLD COAST COLONY.—Gold Coast. (Parts of Sheets 72 and 73.) Scale, 1:1,000,000, or 15.78 statute miles to an inch. Compiled in the Topographical Section, General Staff. Edward Stanford, Agent, London, 1906. (Price, 2s.)

The route of the Government railroad, now in operation to Kumasi, is shown, and the nomenclature along the various routes is large. This sheet completes the provisional mapping, on this scale, of the Gold Coast Colony and its Northern Territories.

SOUTHERN NIGERIA.—Southern Nigeria. Scale, 27 statute miles to an inch. Macmillan & Co., London, 1906.

Illustrates the book, "The Lower Niger and its Tribes," by Major Arthur Glyn Leonard. The map does not show the new boundaries as fixed by the British Government in February, 1906. Its distinguishing feature is that it gives the names not only of the tribes but also of their divisions.

TOGO.—Karte von Togo. Sheets A-2. Tamberma and C-1. Bismarckburg. Scale, 1:200,000, or 3.1 statute miles to an inch. By P. Sprigade. *Mitteilungen aus den Deutschen Schutzgebieten.* Vol. 20, No. 2, Berlin, 1907.

These sheets are a part of the admirable map of Germany's Togo colony, surveys for which have been in progress for about nine years. The map is now nearly completed.

AUSTRALIA.

WESTERN AUSTRALIA.—Geological Map of the Kimberley District. Scale, 12 statute miles to an inch. Ministry of Mines, Perth, 1906.

This excellent map illustrates a report by Dr. R. Logan Jack, on the prospects of obtaining artesian water in the Kimberley District. Colours and other symbols are used to show the position of the geological formations, the wells, and the water prospects. The accompanying letterpress shows the apparent water possibilities in the various geological formations. Dr. Jack passes in review nine distinct areas (defined on the map) in which the search for artesian water is likely to be successful. He believes that artesian water is destined to play an important part in the future of the pastoral industry of the Kimberley District.